country due to red tapism, but it has taken a long time in negotiating extremely complex documents/agreements/structures in such cases with a number of agencies and states. The first mega power project in the private sector is being developed on the Memorandum of Understanding route at Hirma, Orissa by M/s Consolidated Electric Power Asia (India) Ltd. This 3960 MW capacity project envisages supply of power to Rajasthan, Haryana, Punjab, Gujarat and Madhya Pradesh. At present the Power Purchase Agreement is under negotiation. In November, 1995, Government of India formulated a mega power project policy, in pursuance of which a mega power project at Nabinagar in Bihar was conceived, Powergrid floated enquiry for 'Prequalification' of project developers for Nabinagar Power Project through International Competitive Bidding. The notice was issued on the 30th of August, 1996. However, apprehensions were expressed by some of the prospective developers about the availability of coal from the linked mine and the commercial viability of the linked mine block. Subsequently, a new mine block has been allocated for the project. It is proposed to recast the project to a capacity that is commensurate with the reserves in the mine block now allocated for the project.

Gas allocation from Tapti Gas field

2107. SHRIMATI URMILABEN CHIMANBHAI PATEL: Will the Minister of POWER be pleased to state:

(a) whether the Government have made a commitment of gas allocation from Tapti Gas Field to Pipavav Project in Gujarat;

(b) if so, the reasons as to why the allocation of Gas has not been made as yet; and

(c) the alternative arrangement Government propose to allocate Gas to Pipavav Power Project from such other source?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI YOGENDRA K. ALAGH): (a) to (c) It was decided by the Central Government in 1989 to allocate Tapti-Gas to the Pipavav power project in Gujarat. At that time, there was a decision that the gas from Gandhar Gas field will be taken to Hazira and HBJ pipeline. Subsequently, at the request of Government of Gujarat, Gandhar gas was allocated to two power projects at Gandhar. Consequently, it was decided to take Tapti gas to Hazira and HBJ to meet existing commitments. Government of Gujarat has been advised to base the Pipavav project on alternative fuel.

Re-Pumping of Water into Reservoirs

2108. SHRI VEDPRAKASH P. GOYAL: Will the Minister of POWER be pleased to state:

(a) whether any study of economic feasibility and other benefits has been made in the country about re-pumping the water into reservoirs during the low power consumption during lean period to produce power to meet the peak period requirements;

(b) whether this system has been adopted in any Indian Power Plant, if so, the details of the plant;

(c) the details of performance of such plants;

(d) whether Government are aware that such a system is common is most Hydel Plants in the Western Countries; and

(e) the problems in adopting this system more widely in India;

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI YOGENDER K. ALAGH): (a) to (e) The Central Electricity Authority undertook the task of identifying suitable sites for development of pumped storage schemes (PSS) in the country as a part of "Re-assessment of hydro electric potential study". As a result of this study. 56 pumped storage schemes (PSS) sites with an aggregate installation of 93.920 MW have been identified.

Presently, eight PSS with total installation of 1494 MW are in operation, five PSS with total installed capacity of 3310 MW are under various stages of construction. In addition two PSS with total installation of 1090MW have been accorded techno-economical approval by CEA. The details are given in the Statement.

As per information available in Central Electricity Authority, only Paithon (Maharashtra) and Kadamparai (Tamil Nadu) power plants have operated in pumping mode.

The pumped storage schemes are installed in thermal predominant systems based on the need and techno-economic considerations and are generally located in hydro [illegible] deficient areas to meet the peaking capacity requirements and enable better utilisation of thermal capacities. Such schemes have been installed in Western countries as well as in India. Examples of such plants in our country are existing Kadamparai (400 MW) in Tamil Nadu and Purulia (900 MW) in West Bengal which is under construction. The pumped storage installation are also considered to retain the peaking capacity value of such hydro stations where the water availability is expected to reduce at a subsequent stage due to upstream consumptive utilisation of waters. Examples of such projects are the existing Nagarjunasagar (700 MW) in Andhra Pradesh and on going Sardar Sarovar (1200 MW) in Gujarat/Madhya Pradesh.

The economics of such schemes needs careful evaluation.

Statement

PUMPED STORAGE DEVELOPMENT IN INDIA

Sr. No.	Scheme	Installed Capacity	
		No. of units Unit Size (MW)	MW
1	2	3	4
A.	*SCHEMES IN OPERATION*		
1.	Kadana St.-I-Guj.	2×60	120
2.	Paithon-Mah.	1×12	12
3.	Naparjuna Sagar-A.P	7×100	700
4.	Kadamparai-T.N.	4×10	400
5.	Panchet Hill-DVC	1×40	40
6.	Ujjaini-Mah.	1×12	12
7.	Bhira-Mah.	1×150	150
8.	Kadana St. II-Guj.	1×60	60
		Total :	1494

1	2	3	4
B.	*SCHEMES UNDER CONSTRUCTION*		
1.	Kadana St. II-Guj.	1×60	60
2.	Sardar Sarovar-Guj.	6×200	1200
3.	Ghatchar-Mah.	2×125	250
4.	Srisailam-A.P.	6×150	900
5.	Purulia-W.B.	4×225	900
		Total :	3310
C.	*SCHEMES APPROVED BY CEA*		
1.	Bhivpuri-Mah.	1×90	90
2.	Tehri St. II-U.P.	4×250	1000
		Total :	1090
		Total :	5894 MW

Electrified of Village in Meghat Region

2109. DR. SHRIKANT RAMACHANDRA JICHKAR:
SHRI SURINER KUMAR SINGLA:

Will the MINISTER OF POWER be pleased to state:

(a) the number of villages electrified in the Melghat region of the Amravati District of Maharashtra;

(b) whether Government are aware that even if electric lines are present at some places here, there is no benefit of actual electricity;

(c) what are the difficulties faced by this department from the forest department in matters of electricity supply; and

(d) in view of the fact that 4500 tribal children have died due to malnutrition and disease here during the last three years, what effective steps will be taken by Govrnment to make uninterrupted power supply?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI YOGENDER K. ALAGH): (a) to (d) All 317 villages as per 1991 census are reported to be declared elctrified in Melghat region. However, 19 villages that were test charged in March, 1985 had to be switched off due to objections from the Forest Department. It is reported that some of these lines pass through Tiger Project Area. Maharashtra State Electricity Board is reported to be pursuing the matter with Forest Department to obtain the necessary clearances.

Antonomy to State Electricity Boards

2110 SHRI S. S. AHLUWALIA: Will the MINISTER OF POWER be pleased to state:

(a) whether it is a fact that Government have advised the State Governments to grant autonomy to their State Electricity Boards so as to improve their managements;